IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:	Nils Karlsson	§	Group Art Unit:	2476
		§		
Application No	10/556,654	§	Examiner:	Aga, Sori A
		§		
Filed:	11/12/2005	§	Confirmation No:	6545
		§		

Attorney Docket No: P17859-US1
Customer No.: 27045

For: Call Admission Control In VOIP Systems

Via EFS-Web

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313.1450

CERTIFICATE OF TRANSMISSION BY EFS-WEB

Date of Transmission: September 1, 2010

I hereby certify that this paper or fee is being transmitted to the United States Patent and Trademark Office electronically via EFS-Web.

Type or Print Name: Melissa Rhea

/Melissa Rhea/

APPEAL UNDER 35 U.S.C. §134

This Brief is submitted in connection with the decision of the Primary Examiner set forth in Final Official Action dated March 16, 2010, finally rejecting claims 1-10 and 13-20, which are all of the pending claims in this application.

The Commissioner is hereby authorized to charge any appropriate fees under 37 C.F.R. §41.20(b)(2) that may be required by this paper, and to credit any overpayment, to Deposit Account No. 50-1379.

Real Party in Interest

The real party in interest, by assignment, is: Telefonaktiebolaget LM Ericsson (publ)
SE-164 83
Stockholm, Sweden

Related Appeals and Interferences

None.

Status of Claims

Claims 11 and 12 were previously cancelled and are not appealed. Claims 1-10 and 13-20 are pending in the present application, each of which are finally rejected and form the basis for this Appeal. Claims 1, 6-10, 13, and 18-20 stand rejected under U.S.C. 103(a) as being unpatentable over Burst, Jr. (US 7,088,677) in view of Wu, *et al.* (US 2003/0118011 A1); claims 2 and 14 as being unpatentable over Burst as applied to claims 1, 6-10, 13, and 18-20 above, and further in view of Rao (US 6,876,627 B1); claims 3, 5, 15 and 17 as being unpatentable over Burst as applied to claims 1, 6-10, 13, and 18-20 above, and further in view of Murphy, *et al.* (US 6,542,499); claims 4 and 16 as being unpatentable over Burst as applied to claims 1, 6-10, 13, and 18-20 above, and further in view of Rao as applied to claims 2 and 14 and Murphy as applied to claims 3, 5, 15 and 17 above. Claims 1-10 and 13-20, including all amendments to the claims, are attached in the Claims Appendix. The rejection of claims 1, 6-10, 13, and 18-20 is appealed.

Status of Amendments

The claims set out in the Claims Appendix include all entered amendments. An amendment to correct a typographical error in claim 1 was filed on May 17, 2010, along with a response to the Final Office Action dated March 16, 2010.

Summary of Claimed Subject Matter

Claim Element	Specification Reference
1. A method of controlling call admission within a system including a plurality of media gateways interconnected by a packet switched backbone, the method comprising the steps of:	Throughout the Specification, including: page 3, lines 20-22
monitoring the level of congestion suffered by incoming packets for a first gateway wherein	Throughout the Specification, including: page 3, lines 23-25

said incoming packets are transmitted from a group of media gateways over said backbone and wherein said first media gateway acting as a terminating media gateway for said group of media gateways and wherein said group of media gateways are identified by a specific subnet mask of said packet switched backbone; and	
receiving a request for said first media gateway to terminate a new bearer connection extending over said backbone from a second media gateway within said group of media gateways.	Throughout the Specification, including: page 3, lines 26-27
making a decision on the admissibility of that request based upon the previously monitored level of congestion suffered by said first media gateway for said incoming packets from said second media gateway or from said group of media gateways; and	Throughout the Specification, including: page 3, lines 26-30
rejecting or accepting said request for said new bear connection based on said admission decision.	Throughout the Specification, including: page 3, lines 26-30

Claim Element	**Specification Reference**
9. A media gateway arranged to control call admission within a system including a plurality of media gateways interconnected by a packet switched backbone, the media gateway comprising:	Throughout the Specification, including: page 5, lines 6-10
means for monitoring the level of congestion suffered by incoming packets to that gateway from other media gateways over said backbone wherein said gateway acting as a terminating media gateway for said other media gateways and wherein said other media gateways are identified by a specific subnet mask of said packet switched backbone;	Throughout the Specification, including: page 5, lines 11-13
means for receiving a request for that media gateway to terminate a new bearer connection extending over said backbone from a requesting media gateway within said other media gateways;	Throughout the Specification, including: page 5, lines 14-15
means coupled to the monitoring means and the receiving means for making a decision on	Throughout the Specification, including: page 5, lines 16-19

the admissibility of that request based upon the previously monitored level of congestion suffered by said incoming packets transmitted from said requesting media gateway or from said other media gateways containing said requesting media gateway;	
means for rejecting or accepting said request for said new bearer connection based on said admission decision.	Throughout the Specification, including: page 5, lines 16-19

Claim Element	**Specification Reference**
10. A media gateway controller arranged to control call admission within a system including a plurality of media gateways interconnected by a packet switched backbone, the media gateway controller comprising:	Throughout the Specification, including: page 5, lines 21-24
an interface towards a first media gateway;	Throughout the Specification, including: page 5, line 25
means for receiving monitored congestion levels from said first media gateway, the monitored congestion levels being indicative of the congestion suffered by incoming packets to said first media gateway from other media gateways over said backbone wherein said first media gateway acting as a terminating media gateway for said other media gateways and wherein said other media gateways are identified by a specific subnet mask of said packet switched backbone;	Throughout the Specification, including: page 5, lines 26-29
means for receiving a call request requiring that said first media gateway terminate a new bearer connection extending over said backbone from a second media gateway within said other media gateways;	Throughout the Specification, including: page 5, lines 30-32
means for making a decision on the admissibility of that request based upon the congestion level suffered by said incoming packets for said first media gateway from said second media gateway or from said other media gateways; and	Throughout the Specification, including: page 5, line 32 – page 6, line 2
means for rejecting or accepting said request for said new bearer connection based on said decision.	Throughout the Specification, including: page 5, line 32 – page 6, line 2

Claim Element	Specification Reference
13. A computer-readable medium encoded with a computer program product for controlling call admission within a communication system including a plurality of media gateways interconnected by a packet switched backbone, the computer program product performs the following steps when run on a processor:	Throughout the Specification, including: page 6, line 4-6
monitoring the level of congestion suffered by incoming packets for a first media gateway wherein said incoming packets are transmitted from other media gateways over said backbone and wherein said first media gateway acting as a terminating media gateway for said other media gateways and wherein said other media gateways are a identified by a specific subnet mask of said packet switched backbone; and	Throughout the Specification, including: page 3, lines 23-25
receiving a request for said first media gateway to terminate a new bearer connection extending over said backbone from a second media gateway within said other media gateways,	Throughout the Specification, including: page 3, lines 26-27
making a decision on the admissibility of that request based upon the previously monitored level of congestion suffered by said first media gateway for said incoming packets from said second media gateway or from said other media gateways containing the second media gateway.	Throughout the Specification, including: page 3, lines 26-30

The specification references listed above are provided solely to comply with the USPTO's current regulations regarding appeal briefs. The use of such references should not be interpreted to limit the scope of the claims to such references, nor to limit the scope of the claimed invention in any manner.

Grounds of Rejection to be Reviewed on Appeal

I. The rejection of Claims 1, 6-10, 13, and 18-20 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Number 7,088,677 ("Burst") in view of U.S. Patent Publication Number 2003/0118011 A1 ("Wu") is to be reviewed on appeal.

Argument

I. The rejections of Claims 1, 6-10, 13, and 18-20 under 35 U.S.C. § 103(a) as being upatentable over Burst and Wu should be overturned.

Claims 1, 6-10, 13, and 18-20 are pending in the application and are rejected under 35 U.S.C. § 103(a) as being unpatentable over Burst and Wu. While not conceding that the references qualify as prior art, but instead to expedite prosecution, Appellant has chosen to respectfully disagree and shows that the rejections of the Final Office Action dated March 16, 2010 (hereinafter referred to as "Final Office Action") are in clear error. Appellant reserves the right, for example, in a continuing application, to establish that that the cited references, or other references cited now or hereafter, do not qualify as prior art as to an invention embodiment previously, currently, or subsequently claimed.

Appellant respectfully submits that the rejections of the Final Office Action are in error because Burst and Wu, taken alone or in any permissible combination, fail to disclose, teach, or even suggest the limitations of independent claims 1, 9-10, and 13. For example, Burst and Wu, taken alone or in any permissible combination, fail to disclose, teach, or even suggest "receiving a request for said first media gateway to terminate a new bearer connection over said backbone from a second media gateway within said group of media gateways; ... making a decision on the admissibility of that request based upon the previously monitored level of congestion suffered by said first media gateway for said incoming packets from said second media gateway" (*emphasis added*) as recited in independent claim 1. Independent claims 9, 10, and 13 also recite substantially similar elements. In support of the rejection of the independent claims, the Final Office Action refers to col. 8, lines 1-10 of Burst. Appellant assumes that page 3

of the Final Office Action actually intended to refer to col. 18, lines 1-10 of Burst since col. 8, lines 1-10 of Burst refers to part of the brief description of the drawings.

> Col. 18, lines of 1-10 of Burst discusses:
>
> FIG. 10 is a flowchart illustrating the handling of a communications request in an embodiment of the present invention. The media gateway receives a request to create a call to a specific destination 1002. The source media gateway (202) retrieves Db and Dt from the congestion state table 403. If all of the elements of Db exceed Dt, then congestion is implied and the media gateways (202) at both ends of the communication should stop admitting new calls until none of the elements of Db exceed Dt. If Db>Dt, the source gateway (202) rejects the request 1008. If Dt≤Db, the request is accepted 1110. In another embodiment, the congestion state table (403) includes a flag for each destination gateway (202) on the network, denoting whether or not connection requests to the destination should be accepted. This flag is updated periodically.

In other words, the cited passage of Burst discusses receiving a request to create a call to a specific destination, and based on reference to a congestion table, determining whether or not that request is accepted or rejected. In stark contrast, the independent claims recite "receiving a request for said first media gateway to terminate a new bearer connection over said backbone from a second media gateway within said group of media gateways," which refers to the ability for the first media gateway to accept a bearer connection from the second media gateway. Thus, one with skill in the art would not even expect the cited references to disclose, teach, or even suggest at least the aforementioned elements of the independent claims because Burst's congestion analysis occurs on the source media gateway. On the other hand, the recited decision on the admissibility of the request is made based on previously monitored congestion on the first media gateway's incoming packets (the decision is made on the receiving media gateway),

Page 4 of the Final Office Action states that "Burst does not explicitly teach the group of media gateways are identified by a specific subnet mask." In an attempt to remedy this deficiency of Burst, page 4 of the Final Office Action cites paragraphs [0017] and [0041] of Wu. Paragraph [0017] of Wu merely discusses the identification of a VoIP proxy server with the lowest workload and connecting a VoIP client to the identified VoIP proxy server. Paragraph [0041] of Wu discusses:

> In yet another embodiment, a subnet of the entire VoIP proxy network may be configured to transmit the workload information between the VoIP proxy servers and the load monitor 14. In another embodiment, there could exist redundant load monitors 14 for fault tolerance. In yet another embodiment, the VoIP proxy servers may be configured to broadcast network packets. By this means, each VoIP proxy server can send its workload information to multiple load monitors 14 simultaneously instead of via separate packets.

Thus, in other words, Wu discusses configuring a subnet of a VoIP proxy network to transmit workload information. Even if the cited passage of Wu discloses "the group of media gateways are identified by a specific subnet mask" (a point which the Applicant does not concede), nothing in the cited passages of Burst and Wu, taken alone or in any permissible combination, discloses, teaches, or even fairly suggests that Burst's "specific destination" is a part of an identified subnet or any other group. In stark contrast, the independent claims recite "receiving a request for said first media gateway to terminate a new bearer connection over said backbone from a second media gateway within said group of media gateways," (*emphasis added*). At most, the cited passages of Burst and Wu, taken alone or in any permissible combination, discusses receiving, at a media gateway, a request to create a call to a specific destination and analyzing the congestion between the media gateway and the specific destination (Burst) and configuring a subnet of a VoIP proxy network to transmit workload information to at least one load monitor (Wu). There is simply no disclosure, teaching, or fair suggestion that the specific destination is part of a subnet.

In fact, one with skill in the art would not even expect Burst and Wu, taken alone or in any permissible combination, to disclose "receiving a request for said first media gateway to terminate a new bearer connection over said backbone from a second media gateway within said group of media gateways," (*emphasis added*) as recited in independent claim 1 because Wu discusses receiving workload information in order to load balance VoIP proxy server handling of VoIP clients. Measuring workload ("the amount of data being processed per second, the number of clients, etc." *See, e.g.*, paragraph [0031] of Wu) information of a VoIP proxy server cannot be (and should not be) analogized to "level of congestion suffered by incoming packets," as recited in the independent claims. Workload information, as discussed by Wu, refers to available

processing necessary to handle client VoIP transactions. On the other hand, "level of congestion suffered by incoming packets," as recited in the independent claims refers to network bandwidth available to convey packets between a first media gateway and a second media gateway. Thus, Burst and Wu, taken alone or in any permissible combination, fails to disclose, teach, or suggest each and every element of independent claims 1, 9, 10, and 13. Appellant therefore asserts that independent claims 1, 9, 10, and 13 and all claims dependent therefrom are patentable over Burst and Wu, taken alone or in any permissible combination. In view of the foregoing, Appellant respectfully requests that the rejection be overturned.

CONCLUSION

The claims currently pending in the application are patentable over the cited references, and Applicant request that the Examiner's rejection thereof be reversed and the application be remanded for further prosecution.

Respectfully submitted,

/ Ronald S. Liu; Reg. No. 64,170 /

Ronald S. Liu
Registration No. 64,170
Ericsson Patent Counsel

Date: September 1, 2010

Ericsson Inc.
6300 Legacy Drive, M/S EVR1 C-11
Plano, Texas 75024

(972) 583-8512
ronald.liu@ericsson.com

CLAIMS APPENDIX

1. (Previously Presented) A method of controlling call admission within a system including a plurality of media gateways interconnected by a packet switched backbone, the method comprising the steps of:

monitoring the level of congestion suffered by incoming packets for a first gateway wherein said incoming packets are transmitted from a group of media gateways over said backbone and wherein said first media gateway acting as a terminating media gateway for said group of media gateways and wherein said group of media gateways are identified by a specific subnet mask of said packet switched backbone; and

receiving a request for said first media gateway to terminate a new bearer connection extending over said backbone from a second media gateway within said group of media gateways,

making a decision on the admissibility of that request based upon the previously monitored level of congestion suffered by said first media gateway for said incoming packets from said second media gateway or from said group of media gateways; and

rejecting or accepting said request for said new bear connection based on said admission decision.

2. (Previously Presented) The method according to claim 1, wherein the step of monitoring the level of congestion suffered by said incoming packets for said first media gateway comprises the step of:

examining said incoming packets received at said first media gateway to determine whether or not they contain a congestion notification flag.

3. (Previously Presented) The method according to claim 1, wherein the step of monitoring the level of congestion suffered by said incoming packets for said first media gateway comprises the step of:

monitoring the rate at which incoming packets are dropped.

4. (Previously Presented) The method according to claim 3, further comprising the steps of:

monitoring the rate at which incoming packets are dropped by the backbone and

examining said incoming packets received at said first media gateway to determine whether or not said incoming packets contain a congestion notification flag.

5. (Previously Presented) The method according to claim 1, wherein the step of monitoring the level of congestion suffered by said incoming packets for said first media gateway comprises the step of:

associating incoming packets or packet sequences with an originating gateway based upon source addresses or parts of source addresses.

6. (Previously Presented) The method according to claim 1, wherein said packet switched backbone is an Internet Protocol (IP) backbone.

7. (Previously Presented) The method according to claim 1, wherein said step of making said decision on the admissibility of said request is made at said first media gateway.

8. (Previously Presented) The method according to claim 1, wherein said step of making the decision on the admissibility of said request is made at a media gateway controller controlling said first media gateway and said monitored congestion levels are signalled to the media gateway controller by the first media gateway.

9. (Previously Presented) A media gateway arranged to control call admission within a system including a plurality of media gateways interconnected by a packet switched backbone, the media gateway comprising:

means for monitoring the level of congestion suffered by incoming packets to that gateway from other media gateways over said backbone wherein said gateway acting as a terminating media gateway for said other media gateways and wherein said other

media gateways are identified by a specific subnet mask of said packet switched backbone;

means for receiving a request for that media gateway to terminate a new bearer connection extending over said backbone from a requesting media gateway within said other media gateways;

means coupled to the monitoring means and the receiving means for making a decision on the admissibility of that request based upon the previously monitored level of congestion suffered by said incoming packets transmitted from said requesting media gateway or from said other media gateways containing said requesting media gateway;

means for rejecting or accepting said request for said new bearer connection based on said admission decision.

10. (Previously Presented) A media gateway controller arranged to control call admission within a system including a plurality of media gateways interconnected by a packet switched backbone, the media gateway controller comprising:

an interface towards a first media gateway;

means for receiving monitored congestion levels from said first media gateway, the monitored congestion levels being indicative of the congestion suffered by incoming packets to said first media gateway from other media gateways over said backbone wherein said first media gateway acting as a terminating media gateway for said other media gateways and wherein said other media gateways are identified by a specific subnet mask of said packet switched backbone;

means for receiving a call request requiring that said first media gateway terminate a new bearer connection extending over said backbone from a second media gateway within said other media gateways;

means for making a decision on the admissibility of that request based upon the congestion level suffered by said incoming packets for said first media gateway from said second media gateway or from said other media gateways; and

means for rejecting or accepting said request for said new bearer connection based on said decision.

11 – 12. (Canceled)

13. (Previously Presented) A computer-readable medium encoded with a computer program product for controlling call admission within a communication system including a plurality of media gateways interconnected by a packet switched backbone, the computer program product performs the following steps when run on a processor: monitoring the level of congestion suffered by incoming packets for a first media gateway wherein said incoming packets are transmitted from other media gateways over said backbone and wherein said first media gateway acting as a terminating media gateway for said other media gateways and wherein said other media gateways are identified by a specific subnet mask of said packet switched backbone; and

receiving a request for said first media gateway to terminate a new bearer connection extending over said backbone from a second media gateway within said other media gateways,

making a decision on the admissibility of that request based upon the previously monitored level of congestion suffered by said first media gateway for said incoming packets from said second media gateway or from said other media gateways containing the second media gateway.

14. (Previously Presented) The computer-readable medium according to claim 13, wherein the instructions for monitoring the level of congestion suffered by said incoming packets for said first media gateway further comprises instructions for

examining said incoming packets received at that first media gateway to determine whether or not they contain a congestion notification flag.

15. (Previously Presented) The computer-readable medium according to claim 13, wherein the instructions for monitoring the level of congestion suffered by said incoming packets for said first media gateway further comprise instructions for

monitoring the rate at which packets are dropped.

16. (Previously Presented) The computer-readable medium according to claim 13, wherein the instructions for monitoring the level of congestion suffered by said incoming packets for said first media gateway further comprise instructions for

monitoring the rate at which packets are dropped by the backbone and

examining said incoming packets received at the first media gateway to determine whether or not said incoming packets contain a congestion notification flag.

17. (Previously Presented) The computer-readable medium according to claim 13, wherein the instructions for monitoring the level of congestion suffered by said incoming packets for said first media gateway comprises instructions for

associating incoming packets or packet sequences with an originating gateway based upon source addresses or parts of source addresses.

18. (Previously Presented) The computer-readable medium according to claim 13, wherein said packet switched backbone is an Internet Protocol (IP) backbone.

19. (Previously Presented) The computer-readable medium according to claim 13, wherein said instructions for making said decision on the admissibility of said request for said first media gateway to terminate said new bearer connection, is made at the first media gateway.

20. (Previously Presented) The computer-readable medium according to claim 13, wherein said instructions for making the decision on the admissibility of said request for said first media gateway to terminate said new bearer connection is made at a media gateway controller controlling said first media gateway, and said monitored congestion levels are signaled to the media gateway controller by the first media gateway.

* * *

EVIDENCE APPENDIX

None.

RELATED PROCEEDINGS APPENDIX

None.